

Document #:

53.ARC.0009.2.1

Rev.:

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Title:

**Work Instruction for the Approval and Dissemination of Scientific and Technical Information (STI)** 

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| REVISION HISTORY |   |            |                   |
|------------------|---|------------|-------------------|
| REV              | Description of Change   | Author     | Effective<br>Date |
| 0                | Initial release based on 7/98 DNV Audit and 6/98 Internal Audit (see DCR 98-035).                           | M. Hines   | 10/8/98           |
| 1                | Clarifications based on 11/98 DNV Audit (DCR 98-063)  | R. Serrano | 12/18/98          |
| 2                | Changes based on actual requirements of research grants, proposals, agreements and contracts. DCR (01-002). | R. Chase   | 12/12/01          |

| REFERENCE DOCUMENTS |  |  |
|---------------------|--|--|
| Document Number     | Document Title   |  |
| NPG 2200.2          | Guidelines for Documentation, Approval, and Dissemination of NASA Scientific and Technical Information (May be found on NODIS at http://nodis3.gsfc.nasa.gov/library/lib_docs.cfm?range=2) |  |
| NPD 2220.5          | Management of NASA Scientific and Technical Information (May be found on NODIS at http://nodis3.gsfc.nasa.gov/library/lib_docs.cfm?range=2)  |  |
| 53.ARC.0000         | Ames Research Center Quality Manual, Section 4.9   |  |
| 53.ARC.0009.2       | Management and Performance of Research   |  |
| 53.ARC.0016         | Quality Records  |  |
| APD 2305.1          | Ames Policy Directive: Web Publishing (May be found on ADMS at   |  |

Documents referenced in this procedure are applicable to the extent specified herein.



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### **Centerwide System Level Work** Instruction

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#### 1. **Purpose**

This work instruction provides a process for the review, approval and dissemination of Scientific and Technical Information (STI) as required by NPG 2200.2 and NPD 2220.5.

#### 2. Scope

This work instruction applies to organizations that perform research in accordance with SLP 53.ARC.0009.2 where ARC is responsible for the release of the research results. Release of these research results includes publications, presentations, delivery to a non-NASA customer and/or electronic postings on the world wide web. This work instruction does not include classified information.

### 3.

| Definition | ons and Acronyms           |   |
|------------|----------------------------|---|
| 3.1        | Conference<br>Presentation | Oral or poster presentation of scientific and technical findings to audiences at society meetings and other professional gatherings.  |
| 3.2        | Customer                   | Any organization or individual that enters into an agreement with ARC for delivery of ARC products or services.   |
| 3.3        | Customer<br>Reports        | Reports containing STI which are delivered to a customer.   |
| 3.4        | Formal STI                 | Scientific and technical information intended for release in the NASA STI Report Series (e.g., Technical Memorandum, Conference Publication) for which the NASA STI Program maintains responsibility for dissemination (by CASI) and preservation. (NPG 2200.2, Section 1.7). |
| 3.5        | Informal STI               | Scientific and technical information not intended for initial release in the NASA STI Report Series. (NPG 2200.2, Section 1.7).   |
| 3.6        | NASA<br>Publication        | Report published by a NASA center. As part of the NASA STI Report Series, it can be a Technical Publication (TP), Technical Memorandum (TM), Contractor Report (CR), Conference Publication (CP), Special Publication (SP), or Technical Translation (TT).                    |



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| 3.7  | NASA<br>Responsible<br>Official                  | The civil servant Manager designated by a Division Chief, who is responsible for reviewing and approving the accuracy, timeliness, and appropriateness of the published information before WWW dissemination.  |
|------|--|--|
| 3.8  | Non-NASA<br>Publication                          | A technical paper, article, or book reporting on NASA research submitted by a NASA employee, contractor, or grantee for publication through a non-NASA channel (e.g., professional society journals and conference or symposia proceedings).   |
| 3.9  | Preliminary STI                                  | Scientific and technical data or information previously approved for Public Domain release on the WWW, which do not provide new or additional scientific or technical insight (e.g. planetary or stellar observation data, current climactic conditions, results of repetitive experiments). |
| 3.10 | Research<br>Organization                         | Organization that performs research. A research organization can be composed of both ARC personnel and personnel from external organizations and may include one or a combination of STI authors, research teams, and/or organizational line management.                                     |
| 3.11 | Research<br>Results                              | The product of research, such as publications containing scientific and technical information (STI), data, and/or associated prototype hardware and software.  |
| 3.12 | Responsible<br>Manager                           | Person responsible for a specific activity or process (includes organizational line managers and project managers, etc.).  |
| 3.13 | Scientific and<br>Technical<br>Information (STI) | Collected set of facts, analyses, and conclusions resulting from scientific, technical, and related engineering research and development efforts, both basic and applied.  |
| 3.14 | STI Lead Center                                  | Langley Research Center – Information, administration, and policy office for NASA STI.   |
| 3.15 | STI Author                                       | Person responsible for preparing the research plan and activities, conducting the research, and/or presenting the results. This may be the Researcher, Author, or other Originator.  |



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3.16 Local Web Curator (Webmaster)
 3.17 World Wide Web

Person responsible for appearance, maintenance, upgrades, links, and accessibility of sites on the WWW. (APD 2305.1).
Electronic information system based on Internet

3.17 World Wide Web (Web or WWW)

protocols. Placement of STI on the WWW is considered a release to an international audience.

#### 4. Flowchart

There is no flowchart applicable to this document.

#### 5. Responsibilities

### 5.1 **Responsible Manager** or Designee shall:

- Ensure peer reviews are conducted as required by this work instruction.
- Perform Management Reviews and approve STI for dissemination (Division Chief or Designee, in accordance with APD 2305.1, Paragraph 5C).
- Ensure NASA and ARC policies and procedures pertaining to the dissemination of STI are followed.
- Assist STI Author in selection of peer reviewers, and help select reviewers outside the organization if no peer reviewer is available or experienced in the field under consideration within Ames.
- Ensure receipt of approval from Export Control (NF 1676) prior to publishing specific types or categories of STI on the WWW. (APD 2305.1).
- Process preliminary STI in accordance with this procedure and the requirements of APD 2305.1 when appropriate (Division Chief or Designee, in accordance with APD 2305.1, Paragraph 5C).
- Be responsible for coordinating with the Development and Communications Office for any WWW site that contains announcements for release to the news media, per APD 2305.1 (Division Chief or Designee, in accordance with APD 2305.1, Paragraph 5C).
- Be responsible for obtaining approval from the cognizant Director, Program or Project Manager, or Responsible Manager for release of organizational, personnel, or commercialization information, per APD 2305.1.



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- 5.2 **STI Author** (Ames Researcher, Lead Author/First Author, or other STI Originator) shall:
  - Select peer reviewers within Ames with assistance from the Responsible Manager, or consult with Responsible Manager to select reviewers outside the organization if no peer reviewer is available or experienced in the field under consideration within Ames.
  - Ensure that research results (including publications, presentations, etc.)
    are reviewed and approved by management before dissemination. A
    signed ARC 310 is evidence of this review and approval. Reformatting
    or the inclusion/addition of supplementary data referenced in a
    reviewed publication that does not change the intent or conclusions
    drawn by the research results does not require an additional review.
  - Be responsible for changes to the research results. A new ARC 310 and/or NF1676 (and ARC 1676A, where applicable) will be completed for any research result changes that require revision of content or intent, or changes the research result or conclusions. The tables in the Appendices of this document indicate when a new ARC 310 and/or NF 1676 is required.
  - Ensure that approvals for release have been received (forms ARC 310 and/or NF1676 (and ARC 1676A, where applicable) before submitting any STI.
  - Ensure all research results being published have the same "Title" and "Author" information as those listed on form ARC 310 and/or NF 1676 (and ARC 1676A, where applicable). If this information has changed from the original, original "Title" and/or "Author" shall be identified in the "Title" and/or "Author" block(s) of the STI.

### 5.3 Local Web Curator (Webmaster) shall:

 Ensure all links to WWW sites outside of Ames or NASA have appropriate disclaimers, per APD 2305.1.

### 5.4 NASA Responsible Official (WWW site) shall:

- Evaluate STI to be posted on a WWW site for adherence to NASA policies.
- Evaluate STI for technical accuracy.
- Ensure the WWW site has Export Control approval.

### 5.5 **Export Control Officer or designee** shall:

- Evaluate any links from the new WWW site for compliance to Ames policies and NASA requirements for release of information to the public.
- Approve WWW site abstracts.
- Send the approved NF 1676 to DAA final approval.



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Return disapproved NF 1676 to the Division Chief.

#### 6. Procedure

The following procedure is for the dissemination or publication of information, which is the result of basic and applied research and development, and has been designated as STI. Non-STI (outside the Quality System) dissemination of information will not be controlled by this procedure.

- All NASA STI shall be reviewed before release to ensure conformance to standards for professional reports and technical accuracy based on the tables and flowchart in the Appendices of this document, and to determine whether public access to the information must be prohibited or restricted.
- Review is applicable whether publication is accomplished through printing, submission to external channels for publication through any media, electronic release on systems accessible by persons or institutions outside NASA, or delivery to a customer. This review is applicable to presentations to be made before professional audiences. (NPG 2200.2, Section 4.2.3.)

#### 6.1 Formal STI

The STI Author shall determine whether STI is Formal STI. Formal STI includes scientific and technical information intended for release in the NASA STI Report Series for which the NASA STI Program maintains responsibility for dissemination and preservation.

- 6.1.1 The NASA STI Report Series comprises six types of publications:
  - Technical Publication (TP).
  - Technical Memorandum (TM).
  - Contractor Report (CR).
  - Conference Publication (CP).
  - Special Publication (SP).
  - Technical Translation (TT).
- 6.1.2 Initial selection of the correct series for publication is made by the STI Author in conjunction with the NASA Lead Center or Center Publications Office. It is subject to approval as part of the NASA Headquarters office or Center review process. (NPG 2200.2, Section 2.2.2)
- 6.1.3 The STI Lead Center holds overall responsibility for the management and control of the production and distribution of the six STI Report Series. This responsibility is carried out through the NASA Lead Center Technical Publications Manager and the NASA Center STI Managers and Publications Managers. (NPG 2200.2, Section 2.4.2)



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#### 6.2 Informal STI

All NASA STI must be reviewed before it is released to (a) verify its adherence to NASA STI publications policy, (b) ensure its conformance to standards for professional reports and technical accuracy, and (c) determine whether public access to the information must be prohibited or restricted. (NPG 2200.2, Section 4.2.3)

Informal STI shall be reviewed by Peer Review and Responsible Manager.

#### 6.2.1 STI Author shall:

- Complete ARC Form 310 and submit it to Peer Review with applicable STI.
- Address Peer Review comments.
- Submit document to Responsible Manager with signed ARC 310 and/or NF 1676.

Note: The free exchange of comments between authors and reviewers is <u>not</u> to be considered as errors or nonconformances, but as part of the research process.

### 6.2.2 Responsible Manager shall:

- Review STI for compliance to ARC and NASA standards.
- Maintain a log or record of ARC 310 approval/disapproval.
- Send a copy of each NF 1676, when completed, to the Center Publications Office, Code JIL, M/S 241-14. Export Control Public Domain Declaration (PDD) (ARC 1676A) must accompany any NASA form NF 1676 which has the "Publicly Available" box checked in Section III.
- Return disapproved STI to STI Author for revision, and work with STI Author on needed improvements when necessary.
   Determination of cause of disapproval of STI must be made.

If, during the review process, STI is determined to be Limited, or Commercially Sensitive, it must be approved for publication using forms ARC 310 and NF 1676, in accordance with the tables in the Appendices.

Note: In light of the risk involved in not making a correct determination of public domain information, the ARC 1676A form is intended as a guide for use by any publisher of NASA STI and reviewers to enable them to make an informed determination regarding what is or is not considered to be in the public domain.



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6.3 WWW posting of Preliminary STI

All STI to be published on the WWW must conform to the guidelines set out in Ames Policy Directive 2305.1, WWW Publishing. In addition, all WWW published STI shall be processed in accordance with the requirements outlined below:

- 6.3.1 WWW sites containing STI, or those WWW sites that will be posting STI, must obtain Export Control approval for electronic release and dissemination of STI. The following applies:
  - 6.3.1.1 WWW site Authors shall obtain approval for WWW site content (not previously approved) by submitting a NF 1676, with an abstract characterizing the STI, to be published on the WWW site, to Export Control.
  - 6.3.1.2 Preliminary STI to be electronically disseminated on the WWW site must be clearly marked as "preliminary" in documentation and on the required forms. (NPG 2200.2, Section 2.6.1.2)
  - 6.3.1.3 Preliminary STI published on the WWW site must fall within the WWW site abstract approved by Export Control.
  - 6.3.1.4 STI which is different in subject matter, but is to be included on an already approved site, must:
    - Update existing approval by using the forms ARC 310 and NF 1676 review and approval process, or
    - Obtain separate approval using the review and approval process.
- 6.3.2 Preliminary STI must be reviewed and approved by the NASA Responsible Official for adhering to NASA policy and for technical accuracy. The NASA Responsible Official is the civil service Manager authorized by the Division Chief.

Approval is sent via email to the Author and the individual (Local Web Curator) posting the information on an existing WWW site. The approval email must include language that indicates approval to post on the WWW, and shall be retained as a record by the NASA Responsible Official.

6.3.2.1 STI Authors will follow WWW site protocol for posting data to the WWW site for review, or provide data to the Reviewer in electronic WWW format, as it would appear on the WWW site.



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- 6.3.2.2 STI shall be reviewed by the NASA Responsible Official to determine if it meets NASA and Ames criteria and is technically accurate. If STI does not meet NASA and Ames criteria, or is not technically accurate, the Author shall be notified. Notification may take the form of an email. NASA shall publish only STI that has been reviewed at the appropriate organizational level for:
  - technical accuracy,
  - conformance with applicable law, policy, and publication standards,
  - consideration of any limitation applicable to the distribution of such STI.

Note: STI not considered preliminary must have peer and management review and use the ARC 310 and NF 1676 forms for approval per paragraph 6.2 above.

#### 7. Metrics

Disapproval of STI shall be logged and trends analyzed by the Responsible Manager when sufficient data are available.



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### 8. Quality Records

The following Quality Records shall be generated and managed in accordance with 53.ARC.0016.

| Required Record     | Custodian                 |
|---------------------|---------------------------|
| ARC 310             | Responsible Manager       |
| NF 1676             | Responsible Manager       |
| ARC1676A            | Responsible Manager       |
| WWW Approval Emails | NASA Responsible Official |

### 9. Form(s)

Forms required for this document:

| Form Number | Title   |
|-------------|---|
| ARC 310     | Review and Authorization Record   |
| NF 1676     | NASA Scientific and Technical Document Availability Authorization (DAA) |
| ARC 1676A   | Export Control Public Domain Declaration (PDD)                          |



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#### **APPENDIX I**

| When are a NF 1676 and/or an ARC 310 Required? 1676 310   |   |   |
|---|---|---|
| When are a NF 1676 and/or an ARC 310 Required?  |   |   |
| Info previously reviewed/approved for professional conformance AND previously reviewed/approved for public release (1676 and 310 on file) and is presented in a different forum.                      | N | N |
| Formal NASA publication (paper published @ Ames as a NASA TM, etc.)   |   |   |
| paper (includes an abstract)  | Υ | Υ |
| Informal Non-NASA publication (published in a journal, conference proceedings, etc.)  |   |   |
| abstract (being submitted to a journal/conference for publication consideration)  | Υ | N |
| extended/long abstract (contains STI, over 500 words)   | Υ | Υ |
| paper (even if the abstract has been previously approved on a NF1676)   | Υ | Y |
| <ul> <li>abstract taken from an approved existing paper that already has an approved<br/>NF 1676</li> </ul>   | N | N |
| <ul> <li>non-NASA customer report containing STI or research data (Management<br/>Review only, Peer Review not required)</li> </ul>   | Y | Y |
| <b>Conference presentation</b> (oral or poster presentation of scientific and technical findings to audiences at society meetings and other professional gatherings [NPG 2200.2 and 53.ARC.0009.2.1]) |   |   |
| • presentation materials (i.e., printed copies of viewgraphs, 35mm slides, etc.)  | Υ | Υ |
| all handouts <u>must</u> be included with hard copy of viewgraphs or they must have their own 1676  |   |   |
| World Wide Web (electronic information system based on Internet protocols. Placement of NASA STI on the WWW is considered a release to an international audience [APD 2305.1])                        |   |   |
| <ul> <li>NASA STI (may use WWW site approval for ongoing updates within the<br/>approved charter of the site.) Requires approval by Export Control approved<br/>NASA official.</li> </ul>             |   |   |
| ●Initial approval of WWW site   | Υ | N |
| <ul> <li>Update to existing WWW site (and is within scope of original approval) per<br/>6.3.1.2)</li> </ul>   | N | N |
| <ul> <li>Non-NASA STI (Copyright approval from association or publisher must be<br/>received before posting)</li> </ul>   | Y | Y |
| Previously approved STI   | N | N |



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Title and author Information on paper/abstract must match the forms!

(Ames requires an ARC 1676A, Export Control Public Domain Declaration (PDD) whenever a NF 1676 is completed with the "Publicly Available" box checked.)



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#### **APPENDIX II**

#### PEER AND MANAGEMENT REVIEW

| Who                             | Steps  |
|---------------------------------|--|
| STI Author                      | <ul> <li>Initiates ARC 310.</li> <li>Consults with the Responsible Manager for the selection of reviewers.</li> <li>Obtains required peer reviews.</li> <li>Obtains peer reviewers signature on a ARC310 as evidence that all required changes have been incorporated.</li> <li>Submits the completed ARC 310 to Responsible Manager.</li> </ul> |
| Responsible<br>Manager          | <ul> <li>Reviews publication and notifies STI Author of approval or provides comments.</li> <li>Approve ARC 310</li> <li>Ensures signed ARC 310, NF 1676, ARC 1676A and final draft are filed as a quality records.</li> </ul>   |
| NASA<br>Responsible<br>Official | <ul> <li>Reviews proposed STI or data before publication on the WWW.</li> <li>Approval may be in the form of a confirmation email, which becomes a record.</li> </ul>  |

#### **EXPORT CONTROL REVIEW**

| Who                    | Steps   |
|------------------------|---|
| STI Author             | <ul> <li>Initiates NF1676 completing blocks I, II and III.</li> </ul>   |
|                        | Signs block VI.   |
|                        | <ul> <li>Attaches Export Control Public Domain Declaration (PDD) form if it is<br/>determined that that the document will be publicly available.</li> </ul> |
|                        | <ul> <li>When appropriate, attaches the "call for papers" for conference<br/>abstract.</li> </ul>   |
|                        | Submits to Responsible Manager  |
| Responsible<br>Manager | <ul> <li>Obtains Branch (or designee) approval and routes to designees for<br/>Export Control, Program Manager, and Patent Office for approval.</li> </ul>  |
|                        | <ul> <li>Tracks forms through the approval process, as appropriate. Notifies<br/>STI Author of approval.</li> </ul>   |
|                        | <ul> <li>Sends a copy of completed NF1676 to publication office.</li> </ul>   |